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EXAMINER

ANDERSON, MICHAEL D

ART UNIT	PAPER NUMBER
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2433

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07/12/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

pto.phil@dlapiper.com

Office Action Summary	Application No. 10/501,858	Applicant(s) LECOMTE, DANIEL	
	Examiner MICHAEL D. ANDERSON	Art Unit 2433	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 69-81 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 69-81 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Pending claims for reconsideration are claims 69-81. Claims 69, 78, and 80 have been amended.

Response to Arguments

2. Applicant's arguments filed 4/21/2011 have been fully considered but they are not persuasive.

In the remarks, applicant argues in substance:

- a. **That- Ando** does not disclose the feature of the original coded stream being analyzed and generated into a first modified stream and a second stream as recited in claim 69(pg.10).

In response to applicant's argument- Ando discloses an encoding apparatus where a group of frames of dynamic images in [Fig.3/ items 22 and 23] are modified into a first modified stream, the delay device [Fig.3/item 23] and a second stream, Prediction error accumulating device [Fig.3/item22].

it is the combination of Ando and Tahara that teaches the claimed invention, not Ando or Tahara alone (***see 103 rejection below***).

- b. **That- Tahara's** system does not synthesize a first modified stream and a second stream to reconstruct an original coded stream and does not separately transmit the two generated streams from a server to a destination device as recited in claim 69(pg.10).

In response to applicant's argument- Tahara discloses a system which seamlessly splices two encoded video streams where one or more coding parameters are extracted from the first and second encoded streams and one or more parameters of the first or second encoded streams are changed in accordance with the extracted parameters in order to effectuate seamless splicing of the first and second encoded video streams. To synthesize is to combine (a number of things) into a coherent whole and Tahara discloses this as shown in [Fig.3]. Additionally, [Fig.7] discloses a structure of digital broadcasting system which includes a coded stream splicing/synthesizing device which includes the transmission of signals from a material server [Fig.7/item 46 and CM server [Fig.7/item 47] which are encoded/spliced/synthesized] and transmitted as recited in the applicants claim language.

- c. **That-** neither Wu nor Tahara discloses the first modified stream and the second stream as recited in claim 80(pg.11)

In response to applicant's argument- it is the combination of Wu and Tahara that teaches the claimed invention, not Wu or Tahara alone (***see 103 rejection below***).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 69-79** are rejected under 35 U.S.C. 103(a) as being unpatentable over Patent Number: 5,418,569 to Ando in view of Patent No.: US 6,529,550 B2 to Tahara al (hereafter referenced as Tahara).

Regarding **claim 69**, Ando discloses “a method of distributing video sequences in a coded stream including a succession of frames each comprising at least one Intra-frame coded image (I picture) and at least one Prediction coded image corresponding to differences between one at least two images of the succession of images” (***Fig.3/item discloses a group of frames of dynamic images incoming to the delay device [Fig.3/item 23 and prediction error accumulating device [Fig.3/item22]***) “comprising: analyzing an original coded stream prior to transmission to an input/output device of a client and generating” (***prediction error accumulating device [Fig.3/item 22]***), “based upon the analysis, a first modified stream and a second stream” (***delay device [Fig.3/item 23] and prediction error accumulating device [Fig.3/item 22]***), “wherein said first modified stream includes a modified Prediction coded image” (***Fig.3/item 22***), “said modified prediction coded image being a randomly

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generated image or the result of swapping two prediction coded images so that the modification from said at least one prediction coded image results in a visually altered sequence” (**[Fig.3/] prediction error accumulating encoding apparatus**), “and an I picture, which is not modified, said first modified stream maintaining a form for an encoding system applied to said original coded stream after said modification” (**[Fig.1] discloses an X-frame that is not predicted with any frame inclusive of an I-frame**) , “and said second stream including digital information that allows a reconstruction from said modified Prediction coded image to said original coded stream” (**[Fig.3/] prediction error accumulating encoding apparatus**);

Ando does not explicitly disclose “and synthesizing said first modified stream and said second stream at the destination device to reconstruct said original coded stream, separately transmitting the two generated streams from a server to a destination device.”

However, Tahara discloses a system where a stream server received separate streams from three channels supplied and transmitted from an encoder block (**Tahara [Col.11/lines 7-13]**).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ando’s Method and apparatus for predictive coding of moving images with Tahara’s system where a stream server receives separate streams from three channels supplied and transmitted from an encoder block in order to provide additional security as suggested by **Tahara (Tahara [Col.11/lines 7-13])**.

Regarding **claim 70** in view of claim 69, the references combined disclose “wherein said Prediction coded image is an interframe Prediction coded image and/or a bidirectional Prediction coded image calculated by motion compensation from a previous or subsequent interframe Prediction coded image or the I picture.” (***Intraframe prediction coding is widely used in the coding system Ando[Col.1/lines 19-20]***).

Regarding **claim 71** in view of claim 69, the references combined disclose “wherein said second stream includes a pre-modification image that corresponds to the modified Prediction coded image in said first modified stream” (***delay device Ando[Fig.3/item 23] and prediction error accumulating device Ando[Fig.3/item 22]***); “and at said destination device, the modified Prediction coded image in said first modified stream is replaced with the corresponding image in said second stream in the synthesis of reconstructing said original coded stream, (***Ando[Fig.8] discloses original or modified order of preceding frame***).

Regarding **claim 72** in view of claim 69, the references combined disclose “wherein said modified Prediction coded image is a replacement P picture that is different from, but has the same data volume as, and replaces a first P picture following the I picture” (***Ando[Fig.1] discloses a frame encoded independently where the amount of codes obtained by encoded the I-frame where the P-frame is predicted with a preceding frame and predictions in the present frame are calculated Ando[Col.1/lines 44-49]***).

Regarding **claim 73** in view of claim 69, the references combined disclose “wherein said modified Prediction coded image is a modified Prediction coded image whose modification is done by replacing an n-th interframe Prediction coded image (P picture) following the I picture with a first bidirectional Prediction coded image (B picture) following the P picture.” **(Ando[Fig.1] discloses a frame encoded independently where the amount of codes obtained by encoded the I-frame where the P-frame is predicted with a preceding frame and predictions in the present frame are calculated Ando[Col.1/lines 44-49]).**

Regarding **claim 74** in view of claim 69, the references combined disclose “wherein said second stream is distributed via any of a switched telephone network (analog or digital) and a mobile telephone network with GSM, GPRS or UMTS” **(Satellite transmission system Tahara[Fig.1]).**

Regarding **claim 75** in view of claim 69, the references combined disclose “wherein said first modified stream is a stream that can be decoded by a decoder that is itself based on an MPEG standard or is compliant with an MPEG standard” **(digital transmission system utilizing the MPEG standard Tahara[Fig.3] also see Col.2/lines20-24)).**

Regarding **claim 76** in view of claim 69, the references combined disclose “wherein said coded stream is a stream that is encoded in an MPEG standard or is encoded by a method compliant with an MPEG standard” **(digital transmission system utilizing the MPEG standard Tahara[Fig.3] also see Col.2/lines20-24));** said Intra-frame coded image is equivalent to I picture in the MPEG standard; and said

Prediction coded image is equivalent to P picture or B picture in the MPEG standard”

(data quantity streams are coded in accordance with the MPEG standard utilizing I-picture, P-picture, or B-picture Tahara [Col.13/lines15-22]).

Regarding **claim 77** in view of claim 69, the references combined disclose “wherein said first modified stream includes a modified P block that constitutes part of the interframe Prediction coded image (P picture)” ***(predictive frame mode Tahara[Col.18/lines 35-37] also see Frame_pred_frame_det Tahara[Fig.16]).***

Regarding **claim 78**, Ando discloses “a video-stream generating system that generates a video stream as a coded stream including a succession of frames each comprising at least one Intraframe coded image (I picture) and at least one Prediction coded image corresponding to differences between at least two one digital image images of the succession” ***(Fig.3/item discloses a group of frames of dynamic images incoming to the delay device [Fig.3/item 23 and prediction error accumulating device [Fig.3/item22]),*** “said analyzing device detecting said Prediction coded image in said video stream and generating two streams,” ***(delay device [Fig.3/item 23] and prediction error accumulating device[Fig.3/item 22]),*** “one of which is a first modified stream and the other of which is a second stream” ***(delay device [Fig.3/item 23] and prediction error accumulating device[Fig.3/item 22]);*** “wherein said first modified stream includes a modified Prediction coded image” ***([Fig.3/item 22),*** “ said modified prediction coded image being a randomly generated image or the result of swapping two prediction coded images, so that the modification from said at least one prediction coded image results in a visually altered video

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sequence” (**[Fig.3/] prediction error accumulating encoding apparatus**), “and an I picture, which is not modified, said first modified stream maintaining a form for an encoding system applied to said original coded stream after said modification” **[Fig.1] discloses an X-frame that is not predicted with any frame inclusive of an I-frame**); “said second stream including digital information that allows reconstruction from said modified Prediction coded image to said video stream” (**[Fig.3/] prediction error accumulating encoding apparatus**); Ando does not explicitly disclose “and said video- stream generating system, in response to a request from a user, separately transmits said first modified stream and said second stream and, comprising: at least one multimedia server which contains original video sequences; and an analyzing device that analyzes the video stream originating from an input/output server”,

However, Tahara discloses a system where a stream server received separate streams from three channels supplied and transmitted from an encoder block (**Tahara [Col.11/lines 7-13]**).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ando’s video decoding system with Tahara’s system where a stream server receives separate streams from three channels supplied and transmitted from an encoder block in order to provide additional security as suggested by **Tahara (Tahara [Col.11/lines 7-13])**.

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4. **Claim 79** is rejected under 35 U.S.C. 103(a) as being unpatentable over Patent Number 5,418,569 to Ando in view of Patent No.: US 6,529,550 B2 to Tahara et al(hereafter referenced as Tahara) in further view of Patent No.: US 6,829,301 B1 to Tinker et al (hereafter referenced as Tinker).

Regarding **claim 79** in view of claim 78, Ando nor Tahara disclose “further comprising a memory that records a private copy marker indicating for each user a right to each video content” (***anti-theft unit with watermarking Tinker[Col.6/lines 3-9]***); “wherein said right of each user includes a right to watch a private copy of a video content an unlimited number of times, a right to watch the private copy a limited number of times with an indication of the number, or a right prohibiting private copying” (***anti theft unit utilizes encryption which prevents unauthorized viewing Tinker[Col.6/lines 23-29]***) ; “said video-stream generating system, in response to a request from a user for privately copying a specific video content” (***see Encryption and antitheft unit Tinker[Fig.1/item22]***) , “providing said first modified stream to said user; and said video-stream generating system” (***Tinker[Fig.2] which shows R,G,B(signals 1, 2, and 3) being transmitted***, “in response to a request from said user for watching said private copy of the video content, transmitting said second stream to said user after confirming the right to the video content” (***anti theft unit utilizes encryption which prevents unauthorized viewing Tinker[Col.6/lines 23-29]***).

However, Tinker in analogous art discloses an anti-theft water marking unit which utilizes encryption, decryption, decompressing preventing unauthorized viewing while allowing for identification of the source of the stream.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ando's Method and apparatus for predictive coding of moving images and Tahara's system where a stream server receives separate streams from three channels supplied and transmitted from an encoder block with Tinker's anti-theft water marking unit which utilizes encryption, decryption , decompressing preventing unauthorized viewing while allowing for identification of the source of the stream (*Tinker[Col.6/lines 3-9] and [Col.6/ lines 10-2]*).

5. **Claims 80 and 81** are rejected under 35 U.S.C. 103(a) as being unpatentable over Patent No.: US 6,704,846 B1 to Wu et al (hereafter referenced as Wu) in view of Patent No.: US 6,529,550 B2 to Tahara et al (hereafter referenced as Tahara).

Regarding **claim 80**, Wu discloses "A video-stream playing device for playing a video stream as a coded stream including a succession of frames each comprising at least one Intra-frame coded image (I picture) and at least one Prediction coded image corresponding to differences between at least two images of succession of images comprising " (*MPEG data stream including three types of pictures I-frame, P-frame, and B-frame [Col.3/lines 18- 33]*),, "comprising: a stream decoder which decodes said coded stream"(*MPEG video decoder [Fig.3]*) ; "said modified prediction coded image being a randomly generated image or the result of swapping two prediction coded images, so that the modification from said at least one prediction coded image results in a visually altered video sequence" *i.e. P-frame is encoded with additional information for compression purposes(P-frames are encoded with*

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reference to a past data frame [Col.3/lines 24-27]], “and an I picture, which is not modified, said first modified stream maintaining an encoding system applied to said original coded stream after said modification” (**mpeg data stream includes I-frame where the I frame is moderately compressed utilizing a intraframe compression technique [Col.3/lines 18-44]]**); “at least one display interface” (**[Fig.3/item 312]display controller**) ; “and a synthesizing unit that detects said modified Prediction coded image in said first modified stream and reconstructs the original coded steam from said first modified stream and a second stream that includes the Prediction coded image, which is not modified.”, **i.e. combining first and second stream to transmit then receiving information, and decoding to original data (frames are compressed encoded and transmitted and decoded and decompressed for viewing of data form [Col.4/lines 29-33]]**).

Wu does not explicitly disclose “at least one recording interface which stores content of a first modified stream including a modified Prediction coded image”(**MPEG decoder storage unit [Col.8/lines 39-40]]**).

However, Tahara in an analogous art discloses a multiplexer unit which stores modified video and audio streams and transmit information to be demuxed at the receiving point(**Tahara [Fig.3]also see Col.2/lines 15-24]]**).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Wu’s video decoding system with Tahara’s multiplexer unit which stores modified video and audio streams and transmit information to be demuxed at the receiving point in order to provide additional security and data

integrity as suggested by Tahara (***Tahara [Fig.3] also see Col.2/lines 15-24]***).

Regarding **claim 81** in view of claim 80, the references combined disclose “wherein said synthesizing unit further comprises a memory device for temporarily storing said second stream”(***multiplexer unit stores modified streams and transmit information to be de-muxed at receiving point Tahara[Fig.3]***); “and said second stream stored temporarily in said memory device is deleted after the original coded stream is reconstructed from said second stream and said first modified stream, which is stored in said recording interface”(***information is de-muxed and stored at receiving point Tahara [Fig.3]***).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL D. ANDERSON whose telephone number is (571)270-5159. The examiner can normally be reached on Monday-Friday 8am til 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, VIVEK SRIVASTAVA can be reached on (571)272-7304. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MICHAEL D. ANDERSON
Examiner, Art Unit 2433

/VIVEK SRIVASTAVA/

Supervisory Patent Examiner, Art Unit 2433

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